



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,032	10/15/2003	Nancy J. Tolan	05918-322001	2173
26161	7590	05/04/2005	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			RODRIGUEZ, RUTH C	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/688,032	<b>Applicant(s)</b> TOLAN ET AL.	
	<b>Examiner</b> Ruth C Rodriguez	<b>Art Unit</b> 3677	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,7-20,24-37 and 41-54 is/are rejected.
- 7) ☒ Claim(s) 4-6,21-23 and 38-40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)<br>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)<br>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/31/03 &amp; 3/18/05</u> . | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____.<br>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)<br>6) <input type="checkbox"/> Other: _____. |
|--|--|

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 31 December 2003 and 18 March 2005 have been considered for this Office Action.

### ***Specification***

2. The disclosure is objected to because of the following informalities:
  - Page 7, line 3, "the in" should be replaced with --in the--.
  - Page 9, line 16, the blank space between "Number" and the comma should be replaced with --10/688,031--.
  - Page 21, line 10, the blank space between "Number" and the comma should be replaced with --10/688,033--.

Correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 7-20, 24-37 and 41-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. (US 6,851,161 B2) in view of Provost et al. (US 4,984,339).

Kingsford discloses a releasable touch fastener (10) comprising a loop component (12) and a hook component (14). The loop component has a sheet-form loop base and an array of female fastener elements (16) extending from the loop base. The hook component has a sheet-form base and an array of male fastener elements (18) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 1, 1A and 3-7). The touch fastener has an engaged thickness of less than about 0.11 inch (C. 3, L. 63-65). Kingsford fails to disclose that the releasable touch fastener has hook and loop components provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width. However, Provost teaches a releasable touch fastener comprising a loop component (48,50) and a hook component (20). The loop component has a sheet-form loop base (48) and an array of female fastener elements (50) extending from the loop base. The hook component has a sheet-form base (24) and an array of male fastener elements (22) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 17-24). The hook and loop components are provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width (Table III for all materials

illustrated). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a releasable touch fastener provided with at least 0.3 pounds per inch of closure width as taught by Provost in the fastener disclosed by Kingsford since hooks having at least 0.3 pounds per inch of closure width are well known in the art as taught by Provost.

Provost also teaches that:

- The hook and loop components provide an Initial Peel Resistance of at least 0.5 pounds per inch of closure width (Table III for all materials illustrated).
- The hook and loop components provide an Initial Shear Resistance of at least 10 pounds per square inch (Table III for all materials illustrated).
- The hook base comprises a sheet of resin and the male fastener elements have stems extending contiguously from the sheet of resin (Figs. 11-25).
- The male fastener elements have molded crooks (Figs. 11-25).
- The fastener elements are arranged in a density of 350 fastener elements per square inch of the base (C. 9, L. 61-67).
- The stems have opposing surfaces defined by severed resin (Figs. 11-25).
- The Final Peel Resistance is at least 0.4 pound per inch of closure width (Table III for all materials illustrated).
- The Final Peel Resistance is at least 0.5 pound per inch of closure width (Table III for all materials illustrated).

Kingsford and Provost fail to disclose that each male fastener elements has two crooks extending in opposite directions along the hook base. However, it would have

Art Unit: 3677

been obvious to one having ordinary skill in the art at the time the invention was made to have each male fastener elements has two crooks extending in opposite directions along the hook base because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Kingsford and Provost disclose the details of the hook component. Kingsford and Provost fail to disclose that the loop component comprises a woven fabric. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a woven fabric because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Kingsford also discloses that:

- The Engaged Thickness is less than 0.10 inch (C. 3, L. 63-65).
- The Engaged Thickness is less than 0.09 inch (C. 3, L. 63-65).
- The Engaged Thickness is less than 0.08 inch (C. 3, L. 63-65).

For claim 19, a combination of rejections of claims 1 and 2 will result in the limitations of claim 19 without taking into consideration the Final Peel Resistance of at least 0.3 pound per inch of closure width.

Provost also teaches that:

- The Initial Peel Resistance is at least 0.6 pound per inch of closure width (Table III for all materials illustrated).
- The Initial Peel Resistance is at least 0.69 pound per inch of closure width (Table III for all materials illustrated).

- The Initial Peel Resistance is at least 0.8 pound per inch of closure width (Table III for all materials illustrated).

For claim 37, a combination of rejections of claims 1 and 3 will result in the limitations of claim 37 without taking into consideration the Final Peel Resistance of at least 0.3 pound per inch of closure width.

Kingsford and Provost fail to disclose that hook base includes a fabric backing laminated to a side of the hook base opposite the fastener elements. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a hook base includes a fabric backing laminated to a side of the hook base opposite the fastener elements because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Provost also discloses that:

- The Initial Shear Resistance is at least 15 pound per square inch (Table III for most of the materials illustrated).
- The Initial Shear Resistance is at least 20 pound per square inch (Table III for most of the materials illustrated).
- The Initial Shear Resistance is at least 25 pound per square inch (Table III for most of the materials illustrated).

Kingsford discloses a method of releasably fastening two flexible surfaces (12,14). The method comprises the steps of : (a)securing a loop component to one of the surfaces. The loop component has a sheet-form loop base and an array of female fastener elements (16) extending from the loop base. (b) securing a hook component to

the other of the surfaces. The hook component has a sheet-form base and an array of male fastener elements (18) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 1, 1A and 3-7). The hook and loop components have an engaged thickness of less than about 0.11 inch (C. 3, L. 63-65). (c) bringing the hook and loop components together in mating engagement (Figs. 1, 1a and 5-7). Kingsford fails to disclose that the prior art releasable touch fastener has hook and loop components provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width. However, Provost teaches a releasable touch fastener comprising a loop component (48,50) and a hook component (20). The loop component has a sheet-form loop base (48) and an array of female fastener elements (50) extending from the loop base. The hook component has a sheet-form base (24) and an array of male fastener elements (22) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 17-24). The hook and loop components are provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width (Table III for all materials illustrated). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a releasable touch fastener provided with at least 0.3 pounds per inch of closure width as taught by Provost in the fastener disclosed by Kingsford since hooks having at least 0.3 pounds per inch of closure width are well known in the art as taught by Provost.



***Allowable Subject Matter***

Claims 4-6, 21-23 and 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nestergard (US 4,894,060), Wood et al. (US 4,973,326), Martin et al. (US 2002/0042601 A1) and Vanbenschoten et al. (US 2003/0121128 A1) are cited to show state of the art with respect to touch fasteners having some of the features being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Recognizing the fact that reducing cycle time in the processing and

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP § 512). The following is an example of the format the certification might take:

(Typed or printed name of person signing this certificate)


If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP § 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response has been transmitted by facsimile will cause further unnecessary

Art Unit: 3677

delays in the processing of your application, duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

rcr  
May 2, 2005